

Amendments to the claims

This listing of claims replaces all prior versions and listings of claims in this application.

CLAIMS

1. (Currently amended) A method of guiding a user along a target path, comprising ~~the steps of~~:
 - (a) determining the position of the user relative to the target path; and
 - (b) providing respective audio cues to the user via left and right audio channels, these cues being indicative of the relative position determined in step (a) and varying in a complementary manner over at least a range of values of said relative position without thereby forming a spatialized virtual sound source the position of which changes with the value of said ~~relation~~relative position.
2. (Original) A method according to claim 1, wherein the same audio characteristic of the audio cues delivered by the left and right channels is varied with changes in said relative position over said range of values, this characteristic being varied in one sense for the cues delivered by the left channel and in the opposite sense for cues delivered by the right channel as said relative position changes.
3. (Original) A method according to claim 2, wherein said audio characteristic is frequency.
4. (Original) A method according to claim 1, wherein the same audio characteristic of the audio cues delivered by the left and right channels is varied with changes in said relative position over said range of values, said audio characteristic being increased/decreased in magnitude for one said channel as the user moves away from the target path to the side of the path corresponding to that channel, and the said audio characteristic of the other channel being correspondingly decreased/increased in magnitude.

5. (Original) A method according to claim 1, wherein said relative position is determined in step (a) in terms of the perpendicular distance between a centreline of the target path and the user's current position.

6. (Original) A method according to claim 1, wherein the audio cues are only provided whilst the user is within a predetermined distance of the target path centreline.

7. (Original) A method according to claim 1, wherein a characteristic of the audio cues is varied in dependence on distance moved along the target path.

8. (Currently amended) A method according to claim 1, wherein the method includes the ~~further steps following~~, carried out when the user is moving, ~~of~~:

- determining the angle between the user's direction of moving and the direction of pointing of the target-path centreline;
- where this angle is greater than a predetermined magnitude, providing an audible indication to the user of the direction of pointing of the target-path centreline.

9. (Original) A method according to claim 8, wherein said audible indication is one of:

- a synthesized sound source rendered to appear to emanate from a location along the direction of pointing of the target-path centreline;
- a sound signal, independent of said audio cues, provided in the sound channel corresponding to the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing; and
- a variation in said audio cues indicative of the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing.

10. (Currently amended) A method according to claim 1, wherein the method includes the ~~further steps following~~, carried out when the user is stationary, ~~of~~:

- determining the angle between the user's direction of facing and the direction of pointing of the target-path centreline;
- where this angle is greater than a threshold magnitude, providing an audible indication to the user of the direction of pointing of the target-path centreline.

11. (Original) A method according to claim 10, wherein said audible indication is one of:

- a synthesized sound source rendered to appear to emanate from a location along the direction of pointing of the target-path centreline;
- a sound signal, independent of said audio cues, provided in the sound channel corresponding to the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing; and
- a variation in said audio cues indicative of the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing.

12. (Currently amended) An arrangement for guiding a user along a target path, comprising:

- relative-location determining means for determining the position of the user relative to the target path; and
- audio-cue means for providing respective audio cues to the user via left and right audio channels, the audio-cue means being arranged to cause these cues to be indicative of the relative position determined by the relative-location determining means and to vary in a complementary manner over at least a range of values of said relative position without thereby forming a spatialized virtual sound source the position of which changes with the value of said relative position.

13. (Original) An arrangement according to claim 12, wherein the audio-cue means is arranged to respond to changes in said relative position over said range of values by varying the same audio characteristic of the audio cues delivered by the left and right channels, the audio-cue means being operative to vary this characteristic in one sense for the cues delivered by the left channel and in

the opposite sense for cues delivered by the right channel as said relative position changes.

14. (Original) An arrangement according to claim 13, wherein said audio characteristic is frequency.

15. (Original) An arrangement according to claim 12, wherein the audio-cue means is arranged to respond to changes in said relative position over said range of values by varying the same audio characteristic of the audio cues delivered by the left and right channels, the audio-cue means being operative to increase/decrease the magnitude of said audio characteristic for one said channel as the user moves away from the target path to the side of the path corresponding to that channel, and to correspondingly decrease/increase in magnitude the said audio characteristic of the other channel.

16. (Original) An arrangement according to claim 12, wherein the relative-location determining means is arranged to determine said relative position in terms of the perpendicular distance between a centreline of the target path and the user's current position.

17. (Original) An arrangement according to claim 12, wherein the audio-cue means is arranged to provide the audio cues only whilst the user is within a predetermined distance of the target path centreline.

18. (Original) An arrangement according to claim 12, wherein the audio-cue means is arranged to vary a characteristic of the audio cues in dependence on distance moved along the target path.

19. (Original) An arrangement according to claim 12, further comprising:

- means for determining, for a moving user, the angle between the user's direction of moving and the direction of pointing of the target-path centreline; and
- means responsive to said angle being greater than a predetermined magnitude, to provide

an audible indication to the user of the direction of pointing of the target-path centreline.

20. (Original) An arrangement according to claim 19, wherein said audible indication is one of:

- a synthesized sound source rendered to appear to emanate from a location along the direction of pointing of the target-path centreline;
- a sound signal, independent of said audio cues, provided in the sound channel corresponding to the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing; and
- a variation in said audio cues indicative of the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing.

21. (Original) An arrangement according to claim 12, wherein the method includes the further steps, carried out when the user is stationary, of:

- means for determining, for a stationary user, the angle between the user's direction of facing and the direction of pointing of the target-path centreline; and
- means responsive to said angle being greater than a threshold magnitude, to provide an audible indication to the user of the direction of pointing of the target-path centreline.

22. (Original) An arrangement according to claim 21, wherein said audible indication is one of:

- a synthesized sound source rendered to appear to emanate from a location along the direction of pointing of the target-path centreline;
- a sound signal, independent of said audio cues, provided in the sound channel corresponding to the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing; and
- a variation in said audio cues indicative of the side of the target path to which the direction of moving or direction of facing, as the case may be, is pointing.